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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,306	11/14/2001	Franz Gaiser	112740-359	2333
29177	7590	11/01/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			WONG, WARNER	
			ART UNIT	PAPER NUMBER
			2668	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/001,306	GAISER ET AL.	
	Examiner	Art Unit	
	Warner Wong	2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10-21 is/are rejected.
- 7) ☐ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/14/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The detail description lacks the use of "t1" and "t24" as noted in figures 3 and 7.

Appropriate correction is required.

2. The disclosure is objected to because of the following informalities: "RFC 2507" on page 5, line 7 should be "RFC 2705" according to the description. Appropriate correction is required.

Claim Objections

The following claims are objected to because of the following informalities:

3. **Claim 1**, line 13 refers to "a subscriber signal", and so does line 17. It appears that both are referring to the same signal per the descriptions. It is suggested that on line 17, "a subscriber signal" should be changed to "**the** subscriber signal". Claim 3, line 29 refers to "these standards", which is vague. It may be clarified by replacing the phrase with "the ISUP standard or the BICC standard".

4. **Claim 7**, line 23 refers to "these protocols", which is vague. It may be clarified by replacing the phrase with "the H.248 protocol or the MGCP protocol".

5. **Claim 10**, lines 6-7 refer to "these protocols", which is vague. It may be clarified by replacing the phrase with "the Internet protocol or the ATM protocol".

6. **Claim 13**, line 21 refers to "these protocols", which is vague. It may be clarified by replacing the phrase with "the H.323 protocol or the SIP protocol".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 10, and 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama (6,600,735) in view of Farris (5,586,177).

Regarding claim 1, Iwama describes a method comprising:

defining a transmission path (fig. 4) from a calling terminal device (fig. 4, PSTN terminal #105-b) of a switched-through telecommunications network (fig. 4, PSTN #104-b) to a called terminal device (fig. 4, IP terminal, #106) of a packet transmission network (fig. 4, routers #107, 108-a and 108-b) using a network gateway function (fig. 4, Gateway Device #102b);

indicating, via a signaling message which is defined for the packet transmission network and which comes from the called terminal device end, that the called terminal device is signaling the call to a subscriber (fig. 4, "alert" message S412 from the IP terminal);

generating, when the signaling message which is defined for the packet transmission network occurs, a following signaling message (fig. 4, continuation of alert message from Router #108-b to the Gateway device #101-b, where applicant's

definition of “following message” being the ACM message #56 in applicant’s fig. 2 resulting from the “alert” signal #54);

processing the following signaling message (processing defined being after receiving the “alert message” at #102-b, transmitting the “alert message” to 104-b, in fig. 4 of Iwama), wherein the switching on of the subscriber signal for the calling terminal device signal for the calling terminal device is brought about (i.e. brought about generating fig. 4 the message S414, RBT [Ring Back Tone]);

generating, a signaling message which is defined for the switched-through telecommunications network (fig. 4, S413 to PSTN 104-b) and which indicates that a subscriber signal has already been generated for the calling terminal device (fig. 4, S414, ring back tone RBT).

Iwama lacks what Farris’ explicit description using ISUP-based processing steps (ISDN User Part, see col. 9, lines 48-51):

the following signaling message (IAM on col. 14, line 48) which indicates that a subscriber signal has not yet been generated for the calling device;

generating a **standard** (ACM on col. 14, line 52) signaling message (col. 14, lines 49-54, “The ACM includes a variety of information, including a calling party status indicator, eg. Line free or busy. If the line is not busy, the end office 17 rings the station Y and generates an Address Complete Message (ACM) to indicate that it received the request for a call and that the number is not busy.”)

It would have been obvious to one of ordinary skill in this art at the time of invention to explicitly explain the call set-up steps of Iwama using the ISUP standard

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call processing steps described by Farris. The motivation of using ISUP call flow processing steps is to allow compatibility and interworking with many existing ISUP standard-based systems.

Regarding claim 2, Iwama and Farris combined describe the switching method limitations as set forth in claim 1.

Farris describes the use of ISUP signaling messages which is used in switched-through telecommunications networks (Farris, col. 9, lines 48-51). Farris also describes in a normal telephony call setup process (prior to issuing following signaling message), sufficient dialing digits have been transmitted (col. 7, lines 44-46).

Regarding claim 3, Iwama and Farris describe the following signaling message being an IAM in claim 1.

An IAM, by definition, is of one of the ISUP standard messages.

Regarding claim 4, Iwama and Farris describe the following signaling message in claim 1.

Farris describes the following signaling message being an IAM, which is of the ISUP standard. ISUP is part of the SS7 telephony protocol which is used in switched-through telecommunications networks (Farris, col. 9, lines 38-40).

Regarding claim 10, Iwama describes an IP (Internet Protocol) terminal (fig. 4, IP terminal, #106), which operates on an IP network by definition.

Regarding claim 12, Iwama and Farris describe all the limitations set forth in claim 1.

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Farris further describes the switch-through telecommunications network signaling is carried out according to ISUP (col. 9, lines 49-52 and col. 14, lines 45-48).

Regarding claim 13, Iwama and Farris describe all the limitations set forth in claim 1.

Iwama further describes the packet transmission network signaling is carried out according to H.323 protocol (col. 7, lines 45-47).

Regarding claims 14 and 16, Iwama and Farris describe all the limitations set forth in claim 1.

Farris describes the PSTN/switched-through telecommunications network (fig. 4, #104-b), which can comprise one (no further) switching office (per definition of PSTN, where a connection may switch through one or more switching offices of LECs or IXCs, see the illustrative webpage printout of PSTN definition from PC Magazine) in the signaling and transmission paths between the (one) switching office which brings about the switching on of the subscriber signal and a unit of the network gateway function.

The one (originating) switching office (fig. 4, PSTN 104-b) connecting to the calling terminal (fig. 4, PSTN terminal #105-b) brings about the switching on (fig. 4, RBT signal #S414).

Regarding claim 15, Iwama and Farris describe all the limitations set forth in claim 1.

Iwama describes the PSTN/switched-through telecommunications network (fig. 4, #104-b), which can comprise more than one (at least one further) switching office (per

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definition of PSTN, where a connection may switch through one or more switching offices of LECs or IXC's, see the illustrative webpage printout of PSTN definition from PC Magazine) in the signaling and transmission paths between a (first) switching office which brings about the switching on of the subscriber signal and a unit of the network gateway function.

Regarding claim 17, Iwama and Farris describe all the limitations set forth in claim 1.

Iwama describes subscriber signal is fed into a unit (fig. 4, gateway device #102-b) for transferring user data between the switch-through telecommunications network (fig. 4, PSTN #104-b) and the packet transmission network (fig. 4, routers #107, 108-a, #108-b).

Regarding claim 18, Iwama and Farris describe all the limitations set forth in claim 1.

Farris describe the switching on of the subscriber signal being a ringing tone (col. 14, lines 50-51, "If the line is not busy, the end office 17 rings the station Y").

Regarding claim 19, Iwama and Farris describe all the limitations set forth in claim 1.

Farris describes that the following signal message being evaluated is an ISUP IAM message, which contains an indicator whose value depends on whether the called terminal is occupied (col. 14, lines 45-47), where this indicator and the indicator of the subscriber signal ("alert" message as in claim 1) are checked by reference to the following signaling message before the switching on of the subscriber signal.

(col. 14, lines 49-54, "The ACM includes a variety of information, including a calling party status indicator, eg. Line free or busy. If the line is not busy, the end office 17 rings the station Y and generates an Address Complete Message (ACM) to indicate that it received the request for a call and that the number is not busy."

Regarding claim 20, Iwama and Farris describe all the limitations set forth in claim 1.

Iwama illustrates that the overall method is carried out (inherently) when the switching office (fig. 4, PSTN #104-b) is in operation.

Regarding claim 21, Iwama and Farris describe all the limitations set forth in claim 1.

Farris describes that the method may be implemented in various forms and embodiments (col. 19, lines 40-41), but fails to specifically describe the method being implemented by a processor executing a programming instruction sequence.

The examiner takes official notice that the method may be implemented with a processor executing a programming instruction sequence. The motivation being that by implementing the method using a processor executing a programming instruction sequence, it may be more economical (than using a hardware/ASIC-specific implementation.)

9. Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama in view of Farris as applied to claim 1 above, and further in view of Christie (6,754,180).

Regarding claim 6, Iwama and Farris describe the method with all limitations as set forth in claim 1.

Iwama and Farris lack what Christie describes of the network gateway function (controller) being provided using two or more spatially separated units (col. 1, lines 42-44, "The present invention provides intermediate media gateway controllers with H.248 control reach through capability to a media gateway in the bearer path.")

It would have been obvious to one of ordinary skill in this art at the time of invention to describe two spatially separated units for providing a network gateway function in Iwama and Farris. The motivation is "Providing such capability eliminates the need to haul bearer paths unnecessarily to specific nodes just to monitor for DTMF tones or other bearer path information." col. 1, line 44-47).

Regarding claim 7, Iwama, Farris and Christie describe all limitations as set forth in claim 6.

Iwama describes that the user data between the switched-through telecommunications network (fig. 4, #104-b) and the packet transmission network (fig. 4, #107, #108-a, #108-b) is transmitted thru the network gateway unit (fig. 4, #102-b).

Christie describes that the control of the network gateway unit is via the MGCP protocol (col. 1, lines 42-43, "The present invention provides intermediate media gateway controllers with H.248 control reach through capability").

Regarding claim 8, Iwama, Farris and Christie describe all limitations as set forth in claim 6.

Farris describes generating (transmitting) the standard signaling message (ACM) via a switching office of the switch-through telecommunications network (col. 14, lines 50-54).

10. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama in view of Farris as applied to claim 1 above, and further in view of Ketcham (6,654,366).

Iwama and Farris describe all limitations as set forth in claim 1.

Iwama and Farris lack what Ketcham explicitly describes of the switch-through telecommunications network (PSTN) being a network using T1, a time-division multiplex (TDM) method in which data are transmitted in time slots (col. 4, lines 45-47, "The PSTN switch 104 and the H.323 gateway 106 can be coupled by a T1 line.")

It would have been obvious to one of ordinary skill in this art at the time of invention to describe the switch-through telecommunications network using TDM transmission method. The motivation being that TDM transmission has become one of the de facto transmission method deployed within the current PSTN. It would have been more economical to use the current T1 transmission standard (instead of a proprietary transmission method) and more efficient (less time to convert between a proprietary transmission method and the T1 transmission method when mixed methods are used).

Allowable Subject Matter

11. Claims 5 and 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 5:30AM - 2:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Warner Wong
Examiner
Art Unit 2668

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CHIEH M. FAN
PRIMARY EXAMINER